# Mucus - description, benefits, effects on the body and the best sources

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**Abstract.** The sages of the East several thousand years ago identified mucus as one of the 3 main structural elements of the body. Mucus, in balance with other substances, can heal, but its excess negatively affects well-being.

*Key words:* Mucus, general characteristics, daily requirement, digestibility, beneficial properties, signs of deficiency, signs of excess

#### **Products with the maximum mucus content:**

- Seaweed
- Plantain seeds [1]
- Oysters
- Milk
- Pork
- Oatmeal [2]
- Fig [3]
- Flax-seed
- Peas, beans and lentils [4-6]
- Bakery and pasta products
- Potatoes [7]
- Mushrooms
- Bananas [8]
- Melon [9]
- Pumpkin [10]

## **General characteristics of mucus**

Mucous substances are one of the types of water-soluble carbohydrates [11]. These are complex mixtures of heteropolysaccharides present in starch and glycogen.

When interacting with water, they form a gel that can lower blood sugar levels [12] and also reduce the amount of free cholesterol [13]. Mucus is found in some grains, seeds, fruits and vegetables. In addition, some foods stimulate the transformation of starch into mucus.

Various studies by scientists and doctors have proven the positive effect of mucous substances on the functioning of the entire human digestive system.

## The body's daily need for mucus

As mentioned above, mucus belongs to starch-type carbohydrates. Therefore, to calculate the daily mucus requirement, this particular compound should be taken into account. It is the main component of rice, wheat, oats, barley, rye and corn [14]. More than 70% of the total product falls on it.

When calculating the need for products containing mucus, it is necessary to take into account a number of factors: body weight, age, physical or sports activity and type of work activity.

The average daily requirement for carbohydrates is set at 4 to 6 grams per kilogram of body weight. What part of them should be occupied by mucus-containing products is up to you, depending on your body and well-being.

#### The need for mucus increases:

- for various gastrointestinal diseases;
- violation of the integrity of the gastrointestinal mucosa (gastritis, ulcers);
- thin physique and fast metabolism;
- in case of disruption of the functioning of the mucous membrane in any area of the body.

#### The need for mucus is reduced:

- with limited physical activity;
- when the body is at rest;
- for inflammation associated with increased mucus production by the body itself.

## Digestibility of mucus

The absorption of mucus contained in food occurs in the intestines. At the same time, they are broken down into glucose, which is necessary for brain function and the production of glycogen in the liver.

As for the mucus produced by the body itself, they participate in anabolic and catabolic processes of life. Moreover, their production and absorption occurs against the background of an increase and decrease in the total number of blood leukocytes [15].

## Beneficial properties of mucus and its effect on the body:

Mucus protects the oral cavity not only from bacteria and mechanical damage, but also protects tooth enamel from the aggressive effects of certain food components.

Once in the stomach, mucus envelops its walls, protecting them from the negative effects of gastric juice. In the intestines, mucus promotes uniform absorption of the results of digestion.

A uniform layer of mucus on the walls of the intestines and stomach improves the process of digesting food and eliminates constipation. In addition, mucus enhances the secretory activity of the pancreas [16] and protects B vitamins [17] and vitamin C [18] from destruction.

#### **Interaction of mucus with essential elements:**

As for the interaction of mucus with essential elements, the main role here is played by water [19]. Thanks to it, "soft" carbohydrates swell with the formation of a mucous substance. In second place are micro- and macroelements, which dissolve in mucus and are transported with it to the small intestine.

# Signs of lack of mucus in the body:

A lack of mucus in the body indicates a low carbohydrate content in a person's daily diet. Such a deficiency can reduce physical activity and energy tone of the body, weaken its immune system. In addition, diseases of the mucous surfaces are a sign of a lack of mucus. These include diseases of the gastrointestinal tract, as well as lesions of the mucous membranes.

# Signs of excess mucus in the body:

Excess mucus entering the body with food causes apathy, depression [20], frequent colds, and excess weight.

Excess mucus in the intestines can have a laxative effect. In addition, inflammation in the body and frequent colds can be a sign of excess mucus.

## Factors influencing the content of mucus in the body

Nutrition is a determining factor in the content of mucous substances in the body. Firstly, these are mucus-containing products, and secondly, these are products that stimulate the formation of mucus in the body. For example, onions, ginger, garlic [21-23].

## Slime for beauty and health

Mucus that enters our body with food in the right quantity has a beneficial effect on the entire body as a whole.

Together with mucus, we receive all the vitamins, micro- and macroelements contained in the products.

Mucus ensures the correct functioning of the intestines, which has a beneficial effect on our appearance and the health of the body.

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